

## Abstract

A thin-film transistor (hereinafter referred to as "TFT") LCD (liquid crystal display) apparatus and its manufacturing method can improve the shortages of improper metal coating protection and incomplete light shielding. Besides, the semi-conductor layer usually uses A-Si layer as a light shielding and a coating materials. Furthermore, the TFT-LCD apparatus and its manufacturing method of the present invention can effectively overcome incomplete light shielding problem of the prior art without using extra numbers of masks for achieving the anti-electrostatic purpose.